26. A method for detecting HCV nucleic acid in a biological sample comprising the steps of:

extracting HCV nucleic acid from a biological sample;
amplifying the HCV nucleic acid using a first primer having the sequence
5'-gcagaaagcgtctagccatggcgt-3' [SEQ. ID. NO. 1]

a second primer having the sequence

5'-ctcgcaagcaccctatcaggcagt-3' [SEQ. ID. NO. 2] and an amplification component consisting essentially of about 100 to about 200 μM of deoxyribonucleoside triphosphate; about 1 unit to about 2.5 units of Taq polymerase; about 1.5 to about 2.5 mM MgCl₂; and an amplification buffer having 10 mM Tris HCl (pH 8.3) and 500mM KCl;

and detecting the HCV nucleic acid using an oligonucleotide probe having the sequence:

5'-gtcgtgcagcctccaggaccc-3' [SEQ. ID. NO. 3]

32. The method according to claim 30, wherein the deoxyribonucleoside triphosphate is selected from the group consisting of: dATP, dCTP, 5MedCTP, dGTP, dITP, TTP, dUTP, and combinations thereof.



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34. The method according to claim 33, wherein the HCV nucleic acid is labeled with fluorescein , and wherein the detectable marker is an anti-fluorescein /horseradish peroxidase conjugate in an amount of about 1 unit to about 4 units.

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36. The method according to claim 33, wherein the substrate is present in a volume of about 100 μ L.

Please add the following claim:

--38. A method for detecting HCV nucleic acid in a biological sample comprising the steps of:

extracting HCV nucleic acid from a biological sample with a chaotropic agent to produce extracted HCV nucleic acid;

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reverse transcribing the extracted HCV nucleic acid to produce DNA using avian myeloblastosis virus reverse transcriptase in a buffer consisting essentially of 50 mM Tris.HCl (pH 8.3), 6 mM MgCl₂, 40 mM KCl, 4 mM dithiothreitol, and dNTP's in a concentration of 100-200 μ M;

producing fluorescein labeled amplimers by amplifying the DNA using an amplification component consisting essentially of: about 100 to about 200 µM each of dATP, dCTP, dTTP and dGTP; about 1 unit to about 2.5 units of Taq polymerase; about

10 to about 100 pM of a first oligonucleotide primer (SEQ. ID. NO. 1) labeled with fuorescein; about 10 to about 100 pM of a second oligonucleotide primer (SEQ. ID. NO. 2) labeled with fuorescein; about 1.5 to about 2.5 mM MgCl₂; and an amplification buffer having 10 mM Tris HCl (pH 8.3) and 500mM KCl;

denaturing the fluorescein labeled amplimers;

providing an oligonucleotide probe (SEQ. ID. NO. 3) immobilized on a solid medium in a microwell;

adding the denatured fluorescein labeled amplimers to the microwell, thereby immobilizing the denatured fluorescein labled amplimers on the solid medium;

adding anti-fluorescein/horseradish peroxidase conjugate to the microwell, thereby binding the anti-fluorescein/horseradish peroxidase conjugate to immobilized denatured fluorescein labeled amplimers; and

adding a detection solution comprising TMB to the microwell to produce a TMB/horseradish peroxidase reaction,

whereby the presence of HCV in the biological sample is confirmed by the color of the detection solution after the TMB/horseradish peroxidase reaction is stopped.--